

A SWEDE EXPERIMENT.

CO-OPERATIVE TEST AND CHEMICAL ANALYSES.

TWENTY-EIGHT varieties of swede turnips, grown under the co-operative experiment scheme, and superintended by Mr. A. Macpherson, officer in charge of co-operative field experiments in the South Island, were submitted for analysis to Mr. B. C. Aston, Chief Agricultural Chemist. These were grown on the farm of Mr. Joseph Smith, Stirling. All varieties were sown on the 2nd November, 1911, on soil uniform in character. They were treated alike as to cultivation and fertilizers applied, and were harvested on the 25th July, 1912.

Mr. Aston reports as follows: "Each individual root was analysed for percentage of dry matter. The roots were arranged in classes according to weight, the average percentage of dry matter in each class being given. The percentage of dry matter is considered to be a correct index of the feeding-value of the turnip."

In the report giving results of the analyses the Agricultural Chemist gives in each variety the average weight of roots, the number of roots, and the mean dry matter. For the purpose of reference, however, this has been extended by giving the average dry matter per cent. in each, and placing each variety in order according to that percentage. The yield of roots per acre is also given, with the total dry matter per acre in tons which such yields gave.

ANALYSES.

Variety.	Average Weight of Roots, in Pounds.	Number of Roots.	Mean Dry Matter per Cent.	Average Dry Matter per Cent.	Yield of Roots per Acre, in Tons.	Total Dry Matter per Acre, in Tons.
Sutton's Queen	6½	6	12.2	} 13.03	} 38.63	} 5.03
	5	14	13.1			
	4	9	13.3			
	3	4	13.5			
	8	3	12.1			
Montgomery's Skirvings, Purple-top	7	3	12.1	} 12.97	} 55.22	} 7.16
	6	5	12.5			
	5	7	13.1			
	4	21	13.3			
	6	11	12.3			
Nimmo and Blair's John Bull ..	5	16	12.5	} 12.77	} 43.53	} 5.56
	4	19	13.2			
	3	3	13.3			